

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Daohong Zhou and Aimin Meng

Serial No.: 10/529,661

Filed: March 29, 2005

For: USE OF CASPASE INHIBITORS AS A
THERAPEUTIC AGENT AGAINST
RADIATION-INDUCED INJURY

Group Art Unit: 1654

Examiner: Unknown

Atty. Dkt. No.: MESC:008US

Confirmation No.: 8809

CERTIFICATE OF ELECTRONIC TRANSMISSION

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March 28, 2007

Date

Michael R. Krawczoniek

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

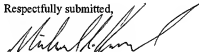
In accordance with 37 C.F.R. §§ 1.97(g), (h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to

be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R. § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Commissioner is authorized to deduct the appropriate fees from Fulbright & Jaworski Deposit Account No.: 50-1212/MESC:008US.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



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Date: March 26, 2007

Form PTO-1449 (modified)		Atty. Docket No. MESC:008US	Serial No. 10/529,661
List of Patents and Publications for Applicant's		Applicant Daobong Zhou Aimin Meng	
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U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A1	2002/0090603	07/11/02	Upton <i>et al.</i>	435	4	06/05/01
	A2	5,552,400	09/03/96	Dolle <i>et al.</i>	514	221	06/08/94
	A3	6,200,969	03/13/01	Fritz <i>et al.</i>	514	212.05	09/12/97
	A4	6,426,413	07/30/02	Wannamaker <i>et al.</i>	540	524	09/05/00

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Language
	B1	EP 0547699	06/23/93	Europe	English
	B2	WO 91/15577	10/17/91	WIPO	English
	B3	WO 93/05071	03/18/93	WIPO	English
	B4	WO 93/09135	05/13/93	WIPO	English
	B5	WO 93/14777	08/05/93	WIPO	English
	B6	WO 93/16710	09/02/93	WIPO	English
	B7	WO 95/26958	10/12/95	WIPO	English

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C1	Coffin, "Chapter 51: Retroviridae and Their Replication," In: <i>Virology</i> , (Fields <i>et al.</i> , eds.), Raven Press, New York, 1437-1500, 1990.
	C2	Cui <i>et al.</i> , "Apoptosis in bone marrow cells of mice with different p53 genotypes after gamma-rays irradiation in vitro," <i>J. Environ. Pathol. Toxicol. Oncol.</i> , 14:159-163, 1995.
	C3	Devine and Chaput, "Chapter 20: Low-Level Effects," In: <i>Military Radiobiology</i> , (Conklin and Walker, eds.), Academic Press, Inc., Orlando, FL, 380-392, 1987.

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Exam. Init.	Ref. Des.	Citation
	C4	Di Leonardo <i>et al.</i> , "DNA damage triggers a prolonged p53- dependent G1 arrest and long-term induction of Cip1 in normal human fibroblasts," <i>Genes Dev.</i> , 8:2540-2552, 1994.
	C5	Dolle <i>et al.</i> , "First examples of peptidomimetic inhibitors of interleukin-1 beta converting enzyme," <i>J. Med. Chem.</i> , 39:2438-2440, 1996.
	C6	Down <i>et al.</i> , "Variations in Radiation Sensitivity and Repair Among Different Hematopoietic Stem Cell Subsets Following Fractionated Irradiation," <i>Blood</i> , 86:122-127, 1995.
	C7	Earnshaw <i>et al.</i> , "Mammalian caspases: structure, activation, substrates, and functions during apoptosis," <i>Annu. Rev. Biochem.</i> , 68:383-424, 1999.
	C8	Estrov <i>et al.</i> , "Effect of Interleukin-1beta Converting Enzyme Inhibitor on Acute Myelogenous Leukemia Progenitor Proliferation," <i>Blood</i> , 86:4594-4602, 1995.
	C9	Flotte and Carter, "Adeno-associated virus vectors for gene therapy," <i>Gene Ther.</i> , 2(6):357-62 1995.
	C10	Ghosh and Bachhawat, "Chapter 4: Targeting of Liposomes to Hepatocytes," In: <i>Liver diseases, targeted diagnosis and therapy using specific receptors and ligands</i> , (Wu and Wu, eds.), Marcel Dekker, New York, 87-104, 1991.
	C11	Giamberresi and Jacobs, "Chapter 14: Radioprotectants," In: <i>Military Radiobiology</i> , (Conklin and Walker, eds.), Academic Press, Inc., Orlando, FL, 265-301, 1987.
	C12	Gorczyca <i>et al.</i> , "Detection of DNA strand breaks in individual apoptotic cells by the in situ terminal deoxynucleotidyl transferase and nick translation assays," <i>Cancer Res.</i> , 53 (8):1945-1951, 1993.
	C13	Graham and Van Der Eb, "A New Technique for the Assay of Infectivity of Human Adenovirus 5 DNA," <i>Virology</i> , 52:456-467, 1973.
	C14	Granier and Gambini, In: <i>Applied radiobiology and radiation protection</i> , Ellis Horwood, New York, 1990.
	C15	Harms-Rigdahl <i>et al.</i> , "Radiation induced apoptosis," <i>Mutat. Res.</i> , 366:171-179, 1996.
	C16	Hasper <i>et al.</i> , "A new four-color flow cytometric assay to detect apoptosis in lymphocyte subsets of cultured peripheral blood cells," <i>Cytometry</i> , 40:167-171, 2000.
	C17	Hay <i>et al.</i> , "Replication of adenovirus mini-chromosomes," <i>J. Mol. Biol.</i> , 175:493-510, 1984.

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	C18	Hearing and Shenk, "Functional analysis of the nucleotide sequence surrounding the cap site for adenovirus type 5 region E1A messenger RNAs," <i>J. Mol. Biol.</i> 167:809-822, 1983.
	C19	Hearing <i>et al.</i> , "Identification of a repeated sequence element required for efficient encapsidation of the adenovirus type 5 chromosome," <i>J. Virol.</i> , 61:2555-2558, 1987.
	C20	Hirabayashi <i>et al.</i> , "The p53-deficient hemopoietic stem cells: Their resistance to radiation-apoptosis, but lasted transiently," <i>Leukemia</i> , 11(3):489-492, 1997.
	C21	Hoyes <i>et al.</i> , "Effect of bcl-2 deficiency on the radiation response of clonogenic cells in small and large intestine, bone marrow and testis," <i>Int. J. Radiat. Biol.</i> , 76:1435-1442, 2000.
	C22	Jaeschke <i>et al.</i> , "Protection against TNF-induced liver parenchymal cell apoptosis during endotoxemia by a novel caspase inhibitor in mice," <i>Toxicology and Applied Pharmacology</i> , 169:77-83, 2000.
	C23	Klein <i>et al.</i> , "High-velocity microprojectiles for delivering nucleic acids into living cells," <i>Nature</i> , 327:70-73, 1987.
	C24	Levero <i>et al.</i> , "Defective and nondefective adenovirus vectors for expressing foreign genes in vitro and in vivo," <i>Gene</i> , 101:195-202, 1991.
	C25	Los <i>et al.</i> , "Activation and caspase-mediated inhibition of PARP: a molecular switch between fibroblast necrosis and apoptosis in death receptor signaling," <i>Mol. Biol. Cell</i> , 13:978-988, 2002.
	C26	Mann <i>et al.</i> , "Construction of a retrovirus packaging mutant and its use to produce helper-free defective retrovirus," <i>Cell</i> , 33:153-159, 1983.
	C27	Mauch <i>et al.</i> , "Hematopoietic stem cell compartment: acute and late effects of radiation therapy and chemotherapy," <i>Int. J. Radiat. Oncol. Biol. Phys.</i> , 31:1319-1339, 1995.
	C28	Nagafuji <i>et al.</i> , "Fas antigen (CD95) and hematopoietic progenitor cells," <i>Leuk. Lymphoma</i> , 24:43-56, 1996.
	C29	Naito <i>et al.</i> , "Phosphatidylserine Externalization Is a Downstream Event of Interleukin-1 beta-Converting Enzyme Family Protease Activation During Apoptosis," <i>Blood</i> , 89:2060-2066, 1997.
	C30	Neta and Okunieff, "Cytokine-Induced Radiation Protection and Sensitization," <i>Semin. Radiat. Oncol.</i> , 6:306-320, 1996.

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	C31	Nicolas and Rubenstein, "Chapter 25: Retroviral Vectors," In: <i>Vectors: A survey of molecular cloning vectors and their uses</i> , (Rodriguez and Denhardt, eds.), Stoneham: Butterworth, 493-513, 1988.
	C32	Nicolau <i>et al.</i> , "Liposomes as carriers for in vivo gene transfer and expression," <i>Methods Enzymol.</i> , 149:157-176, 1987.
	C33	Norbury and Hickson, "Cellular responses to DNA damage," <i>Annu. Rev. Pharmacol. Toxicol.</i> , 41:367-401, 2001.
	C34	Okada <i>et al.</i> , "In Vivo and In Vitro Stem Cell Function of c-kit- and Sca-1-Positive Murine Hematopoietic Cells," <i>Blood</i> , 80:3044-3050, 1992.
	C35	Paskind <i>et al.</i> , "Dependence of Moloney Murin Leukemia Virus Production on Cell Growth," <i>Virology</i> , 67:242-248, 1975.
	C36	PCT International Search Report, dated August 24, 2004.
	C37	Perkins <i>et al.</i> , "The lpr gene is associated with resistance to engraftment by lymphoid but not erythroid stem cells from normal mice," <i>J. Immunol.</i> , 138:466-469, 1987.
	C38	Ploemacher <i>et al.</i> , "Murine haemopoietic stem cells with long-term engraftment and marrow repopulating ability are more resistant to gamma-radiation than are spleen colony forming cells," <i>Int. J. Radiat. Oncol. Biol. Phys.</i> , 61:489-499, 1992.
	C39	Poggi <i>et al.</i> , "Sensitizers and protectors of radiation and chemotherapy," <i>Curr. Probl. Cancer</i> , 25:334-411, 2001.
	C40	Pruschy <i>et al.</i> , "Key targets for the execution of radiation-induced tumor cell apoptosis: the role of p53 and caspases," <i>Int. J. Radiat. Oncol. Biol. Phys.</i> , 49:561-567, 2001.
	C41	Randall and Weissman, "Phenotypic and Functional Changes Induced at the Clonal Level in Hematopoietic Stem Cells After 5-Fluorouracil Treatment," <i>Blood</i> , 89:3596-3606, 1997.
	C42	Renan, "Cancer genes: current status, future prospects, and applications in radiotherapy/oncology," <i>Radiother. Oncol.</i> , 19:197-218, 1990.
	C43	Ridgeway, "Chapter 24: Mammalian Expression Vectors," In: <i>Vectors: A survey of molecular cloning vectors and their uses</i> , (Rodriguez and Denhardt, ed.), Stoneham, Butterworth, 467-492, 1988.

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	C44	Roux <i>et al.</i> , "A versatile and potentially general approach to the targeting of specific cell types by retroviruses: application to the infection of human cells by means of major histocompatibility complex class I and class II antigens by mouse ecotropic murine leukemia virus-derived viruses," <i>Proc. Natl. Acad. Sci. USA</i> , 86:9079-9083, 1989.
	C45	Sane and Bertrand, "Caspase inhibition in camptothecin-treated U-937 cells is coupled with a shift from apoptosis to transient G1 arrest followed by necrotic cell death," <i>Cancer Res.</i> , 59:3565-3569, 1999.
	C46	Scidita <i>et al.</i> , "Differential gene expression in p53-mediated G(1) arrest of human fibroblasts after gamma-irradiation or N-phosphoacetyl-L-aspartate treatment," <i>Carcinogenesis</i> , 21:2203-2210, 2000.
	C47	Shen and White, "p53-dependent apoptosis pathways," <i>Adv. Cancer Res.</i> , 82:55-84, 2001.
	C48	Susin <i>et al.</i> , "Mitochondrial release of caspase-2 and -9 during the apoptotic process," <i>J. Exp. Med.</i> , 189:381-394, 1999.
	C49	Tibbetts, "Viral DNA sequences from incomplete particles of human adenovirus type 7," <i>Cell</i> , 12:243-249, 1977.
	C50	Weiss and Landauer, "Radioprotection by antioxidants," <i>Ann. NY Acad. Sci.</i> , 899:44-60, 2000.
	C51	White <i>et al.</i> , "Lentivirus vectors using human and simian immunodeficiency virus elements," <i>J. Virol.</i> , 73(4):2832-2840, 1999.
	C52	Wong <i>et al.</i> , "Appearance of beta-lactamase activity in animal cells upon liposome-mediated gene transfer," <i>Gene</i> , 10:87-94, 1980.
	C53	Zucali, "Mechanisms of protection of hematopoietic stem cells from irradiation," <i>Leuk. Lymphoma</i> , 13:27-32, 1994.

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